

WHAT IS CLAIMED IS:

1. A measuring device (1; 21; 33) for controlling an installation torque of a fastening element (4; 32) and securable to engagement means (3; 35) of the fastening element (4; 32), the measuring device (1; 21; 33) comprising indicator means (5; 24) for a visual display of the installation torque; a plurality of microcapsules filled with a dispersible color die and supported on the indicator means (5; 24); a transparent, at least regionwise, covering (7.1; 7.2; 22) provided on an outer surface of the indicator means (5; 24); and an opening (27) through which a fastening element (4; 32) can extend.
2. A measuring device according to Claim 1, wherein the transparent covering (22) has at least one capillary slot (25.1-25.8).
3. A measuring device according to Claim 1, further comprising a washer (2; 34), the indicator means (5; 24) being located between the washer (2; 34) and the transparent covering (7.1; 7.2; 22).
4. A measuring device according to Claim 1, wherein the plurality of microcapsules comprises at least two types of microcapsules filled with different color dies, and wherein a microcapsule of a first type breaks under a smaller load than a microcapsule of a second type.

5. A measuring device according to Claim 1, wherein the plurality of microcapsules is filled with a fluorescent color die.

6. A fastening system, comprising a fastening element (32); and a measuring device (33) having an opening (27) through which the fastening element (33) is extendable, indicator means (5; 24) for a visual display of an installation torque, a plurality of microcapsules filled with a dispersible color die and supported on the indicator means (5; 24), and a transparent at least regionwise covering (7.1, 7.2; 22) provided on an outer surface of the indicator means (5; 24).